**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

**OSM Departure Time:** 1900

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018359

Address: 333 Burma Road **Date Inspected:** 17-Nov-2010 City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Contractor: **Location:** Shanghai, China

**CWI Name:** Mr.Oiu Wen. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower and Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

#### **NDT**

#### Tower Trial Assembly:

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as South Tower 119M Doublers Plate. The weld designations reviewed are as follows.

SSD1-FASA4-1B/E-17, 14, 15, 16, 30, 29

NDT Notification No-07395

#### **BAY 10**

This QA Inspector performed randomly Visual Inspection of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as OBG Bike Path. The weld designations reviewed are as follows.

BK004A3-027-065, 067, 068, 100, 101, 102, 069, 070, 071, 103, 104, 105 BK004A4-027-080, 082, 083, 100, 101, 102, 085, 086, 087, 103, 104, 105



## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

NDT Notification No-07391

This QA Inspector observed the following work in progress:

#### **BAY 10:**

OBG Bike path, FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052075 Perform Flux Core Arc Welding (FCAW) on OBG Bike path bottom cover plate fit up plug weld. Plate identified as BK004A1-028. ZPMC QC Identified as Yu Zhi Lai. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-Plug.

### SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 057220, 050038, Perform Shielded Metal Arc Welding (SMAW) on Tower Façade plate. Joint identified as ND1-SFSA4-710-2-13, 14, 5, 6 and ND1-SFSA4-90-3-31, 32, 1, 2. ZPMC QC Identified as Jiang Xiang Bo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2114. For more information see below attached picture number 1.

#### **OBG FCAW process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 052763, 057180 Perform Flux Core Arc Welding (FCAW) on U Rib splice plate. Joint identified as GGL-MQ-2021-32, 33-1, 2. ZPMC QC Identified as Deng Zhi Bing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2231-Tc-U4b-F.

#### **BAY 11:**

#### Tower SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054460, Perform Shielded Metal Arc Welding (SMAW) on Tower Bracket Stiffener lift 5. Joint identified as SD1-BRSA5-1-19B. ZPMC QC Identified as Xu Jie. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-Tc-U4b. For more information see below attached picture number 2.

## OBG FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040723 Perform Flux Core Arc Welding (FCAW) on OBG Bike Path. Joint identified as BK004A6-019-023, 024, 035, 160. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2332-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 205649 Perform Flux Core Arc Welding (FCAW) on OBG Bike Path. Joint identified as BK004A8-019-023, 024, 035, 036. ZPMC CWI Identified as Yu Dong Ping. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2332-Tc-P4-F.

OBG Repair welding, FCAW process:

## WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA Inspector observed ZPMC qualified welding personnel identified as 202100 Perform Flux Core Arc Welding (FCAW) on OBG Bike Path. Joint identified as BK004A3-022-002. ZPMC CWI Identified as Yu Dong Ping with temporary welding repair report WRR-B-WR17093. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-1G (1F) Repair.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





## **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho phone: 150002048250, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer